

It is very difficult to accurately identify how much the UK spends on human relevant, Non Animal Methodology (NAMs) research. Calculations do though suggest it is close to insignificant at less than 1% of that allocated to animal research.

# For example:

- 1. In 2019, the UK government's gross expenditure on research and development (R&D) was £ 38.5 billion. Around 40%, £ 15.4 billion, is spent on basic research which uses many animals and is largely publicly funded. The annual budget of the NC3Rs is around £10 million, of which around £ 6.375 million is for "replacement" although this is not all NAMs as includes replacing one species with another. This equates to just 0.016%.
- 2. NAMs funding represents between 0.2% and 0.6% of total biomedical research funding in the UK and  $\sim$ 0.02% of the total public expenditure (£10.45B for 2019-2020) on R&D.

Funding must be urgently reallocated on a scale that reflects the urgency and importance of this issue. In the existing animal research paradigm, novel drugs take 10 -15 years to reach the market at a cost of over £1.5 billion.

There is an urgent need for greater funding to improve the human relevance of research and greater human safety by accelerating the uptake of NAMs. The Government consistently points to the National Centre of 3Rs (NC3Rs) as the main source of funding for NAMs. However, the NC3Rs annual budget is only around £10 million and evidence provided to the All-Party Parliamentary Group (APPG) on Human Relevant Science in May 2021 indicated that around 16% of grants have focused on the 'refinement' of animal research, with around 20% focusing on reduction, neither of which address translational problems. Core funding for the NC3Rs is provided by the MRC and BBSRC. Since their combined budget allocation for 2021/22 was over £1 billion, a negligible proportion of this is being allocated to the NC3Rs. Appropriate funding will be essential for enabling the UK to realise its scientific and economic potential in the field of human relevant research.

ASPA 1986, Section 20B, has enshrined the concept of the development of alternative strategies as a legal requirement. The Secretary of State (SOS) must support the development and validation of alternative strategies. Alternatives must be developed and promoted at a Governmental level, not just at a scientific level. Although the SOS has statutory duties to support the development of non animal testing this is often overlooked.



Please look at <a href="https://www.humanrelevantscience.org/wp-content/uploads/APPG-report-March-2022.pdf">https://www.humanrelevantscience.org/wp-content/uploads/APPG-report-March-2022.pdf</a> for more information on funding and the lack of uptake of NAMs.

The NC3Rs commissioned, Dr Frances Rawle, former Director of Policy, Ethics and Governance at the Medical Research Council (MRC), to produce a detailed review of the current 3Rs landscape.

https://nc3rs.org.uk/sites/default/files/2023-02/Rawle%20project%20report.pdf

This is highly critical of the lack of funding and availability of information of "replacements."

#### Extracts from conclusions are:

Replacement is the area least well covered by existing review processes; the possibility for replacement is best considered at an early stage of the research planning process as THE Animal Welfare and Ethical Review Bodies (AWERBs) find it difficult to challenge once funding is in place. AWERBs and the Animals in Science Regulatory Unit (ASRU) rarely have the detailed scientific expertise to determine whether replacements are available and suitable, so the best strategy for improving this situation would be to ensure that an expert peer review is organised by the funders.

Improving the availability of information on replacements and how they compare to established animal methods, the ability of Named Information Officers (NIOs) to help researchers fulfil their responsibilities to search for replacements, and the access to expert help and funding to try out new methodologies should help speed uptake of replacement methods.

This is the subject of our Jan 2023 Parliamentary debate where we suggested an advisory NAMs specialist committee to be incorporated into the project licence application process, Even an independent specialist report reached the same conclusion.

In the Westminster Hall debate on 19 February 2024 please see (https://hansard.parliament.uk/commons/2024-02-19/debates/0C64E6BD-AE31-4DD7-80BB-3CEDC6272C2E/AnimalTesting) the Science Minister, Andrew Griffiths, said:

"Ahead of today's debate, I asked UKRI that we double our investment in research to achieve the three Rs and develop non-animal alternatives. I can announce that, from £10



million this year, that investment will reach £20 million per annum across the system in fiscal year 2024-25, which is a doubling of what is given to research in this space."

In July 24 in response to a Freedom of Information Request asking for confirmation that the additional £10 million had been received prior to the dissolving of parliament before the General Election on 4 July. The NC3Rs responded:

'It is important to note that the announcement was about additional funding across "the system" and not specifically for the NC3Rs. That said we have recently received an additional £5M to spend in this financial year on non-animal methods. Of this, we are spending £4M on grants for infrastructure to accelerate the use of approaches that replace the use of animals in research and testing — please see <a href="https://nc3rs.org.uk/our-funding-schemes/non-animal-methods-infrastructure-grants">https://nc3rs.org.uk/our-funding-schemes/non-animal-methods-infrastructure-grants</a> for further information. We are also spending £1M on projects to characterise and validate the use of non-animal derived reagents and products for use in in-vitro research. — please see <a href="https://nc3rs.org.uk/non-animal-derived-product-validation-grants">https://nc3rs.org.uk/non-animal-derived-product-validation-grants</a> for further information.'

Will the Labour government be honouring the remaining £5 million – as your MPs.

## **UK Government Life Science Vision 2021**

 $\frac{https://assets.publishing.service.gov.uk/media/612763b4e90e0705437230c3/life-sciences-vision-2021.pdf$ 

Where is the use of existing and development of new NAMs?

Look at the admission on page 48:

'Dementia and Alzheimer's Disease is the leading cause of death in the UK, with an economic cost of over £25bn per annum. This cost will grow significantly in the coming decades as the population ages, a trend that will be replicated globally, and particularly in large middle-income countries whose demographic profiles are rapidly changing.

Despite the FDA licensing the first new treatment for Alzheimer's Disease in nearly twenty years in June 2021, there has only been incremental progress in our understanding of the disease and other common dementias in recent decades, with only supportive care and symptomatic treatment available for those with the condition.'



How can it not be obvious to anyone reading this that animal research has not worked, priority must be given to human relevant NAMs and funding must be significantly redirected. Look at the economic cost to the country of £25 Billion per annum yet still researchers are injecting poisons and putting implants into non human primate brains.

Reading on look at the investment - 'Over the last decade, there have been a range of UK-led initiatives to increase the volume and quality of research into dementia and other forms of neurodegeneration, including:

- The UK Dementia Research Institute, supported by £190m of funding from the Medical Research Council, focuses on basic and translation science, early-stage development of diagnostics and treatments, experimental medicine, and the development of a new generation of technology to support those living with dementia.
- The NIHR Dementia Translational Research Collaboration, which supports Biomedical Research Centres and NHS-university partnerships to conduct dementia research.
- The Dementia Discovery Fund, a £250m international VC programme that invests in, and creates, new biotech companies to deliver high impact therapeutics for age-related dementias.

Yet we don't have cures or even successful evidenced treatments for slowing progression.